



SEQ101~1.ST25  
SEQUENCE LISTING

#12/09  
Harry

<110> Sedivy, John  
Kolch, Walter  
Yeung, Kam Chi

<120> Kinase Inhibitors and Methods of Use in Screening Assays and Modulation of  
Cell Proliferation and Growth

<130> 3564/1010

<140> 09/654,281

<141> 2000-09-01

<150> 60/151,992

<151> 1999-09-01

<160> 11

<170> PatentIn version 3.1

<210> 1

<211> 94

<212> PRT

<213> Artificial Sequence

<220>

<223> consensus sequence

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<221> MISC\_FEATURE

<222> (3)..(5)

<223> Xaa = any amino acid

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<222> (9)..(9)

<223> a hydrophobic amino acid residue

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<222> (11)..(13)

<223> Xaa = any amino acid

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<222> (14)..(14)

<223> a negatively charged amino acid residue

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<222> (15)..(18)

<223> Xaa = any amino acid residue

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<222> (20)..(21)

<223> Xaa = any amino acid residue

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<221> MISC\_FEATURE

<222> (23)..(72)

<223> Xaa = any amino acid residue, 0 to 40 residues may be missing

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<221> MISC\_FEATURE

<222> (74)..(77)

<223> Xaa = any amino acid residue

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<222> (79)..(82)

<223> Xaa = any amino acid residue, 0 to 2 residues may be missing

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<222> (84)..(84)

<223> Xaa = any amino acid residue

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<222> (87)..(87)

<223> Xaa = an aromatic amino acid residue

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<222> (89)..(89)

<223> Xaa = any amino acid residue

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<222> (90)..(90)

<223> a hydrophobic amino acid residue

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<222> (91)..(93)

<223> Xaa = any amino acid residue

<400> 1

Thr Leu Xaa Xaa Xaa Asp Pro Asp Glx Pro Xaa Xaa Xaa Asx Xaa Xaa  
1 5 10 15

Xaa Xaa Glu Xaa Xaa His Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
35 40 45

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
50 55 60

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Tyr Xaa Xaa Xaa Xaa Pro Xaa Xaa  
65 70 75 80

Xaa Xaa Gly Xaa His Arg Xaa Val Xaa Glx Xaa Xaa Xaa Gln  
85 90

<210> 2

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2

Met Pro Val Asp Leu Ser Lys Trp Ser Gly Pro Leu Ser Leu Gln Glu  
1 5 10 15

Val Asp Glu Gln Pro Gln His Pro Leu His Val Thr Tyr Ala Gly Ala  
20 25 30

Ala Val Asp Glu Leu Gly Lys Val Leu Thr Pro Thr Gln Val Lys Asn  
35 40 45

Arg Pro Thr Ser Ile Ser Trp Asp Gly Leu Asp Ser Gly Lys Leu Tyr  
50 55 60

Thr Leu Val Leu Thr Asp Pro Asp Ala Pro Ser Arg Lys Asp Pro Lys  
65 70 75 80

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Tyr Arg Glu Trp His His Phe Leu Val Val Asn Met Lys Gly Asn Asp  
85 90 95

Ile Ser Ser Gly Thr Val Leu Ser Asp Tyr Val Gly Ser Gly Pro Pro  
100 105 110

Lys Gly Thr Gly Leu His Arg Tyr Val Trp Leu Val Tyr Glu Gln Asp  
115 120 125

Arg Pro Leu Lys Cys Asp Glu Pro Ile Leu Ser Asn Arg Ser Gly Lys  
130 135 140

His Arg Gly Lys Phe Lys Val Ala Ser Phe Arg Lys Lys Tyr Glu Leu  
145 150 155 160

Arg Ala Pro Val Ala Gly Thr Cys Tyr Gln Ala Glu Trp Lys Lys Tyr  
165 170 175

Val Pro Lys Leu Tyr Glu Gln Leu Ser Gly Lys  
180 185

<210> 3

<211> 187

<212> PRT

<213> Mus musculus

<220>

<221> MISC\_FEATURE

<222> (150)..(150)

<223> Xaa = any amino acid residue

<400> 3

Met Ala Ala Asp Ile Ser Gln Trp Ala Gly Pro Leu Cys Leu Gln Glu  
1 5 10 15

Val Asp Glu Pro Pro Gln His Ala Leu Arg Val Asp Tyr Ala Gly Val  
20 25 30

Thr Val Asp Glu Leu Gly Lys Val Leu Thr Pro Thr Gln Val Met Asn  
35 40 45

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Arg Pro Ser Ser Ile Ser Trp Asp Gly Leu Asp Pro Gly Lys Leu Tyr  
50 55 60

Thr Leu Val Leu Thr Asp Pro Asp Ala Pro Ser Arg Lys Asp Pro Lys  
65 70 75 80

Phe Arg Glu Trp His His Phe Leu Val Val Asn Met Lys Gly Asn Asp  
85 90 95

Ile Ser Ser Gly Thr Val Leu Ser Asp Tyr Val Gly Ser Gly Pro Pro  
100 105 110

Ser Gly Thr Ser Ile His Arg Tyr Val Trp Leu Val Tyr Glu Gln Glu  
115 120 125

Gln Pro Leu Ser Cys Asp Glu Pro Ile Leu Ser Asn Lys Ser Gly Asp  
130 135 140

Asn Arg Gly Lys Phe Xaa Val Glu Thr Phe Arg Lys Lys Tyr Asn Leu  
145 150 155 160

Gly Ala Pro Val Ala Gly Thr Cys Tyr Gln Ala Glu Trp Asp Asp Tyr  
165 170 175

Val Pro Lys Leu Tyr Glu Gln Leu Ser Gly Lys  
180 185

<210> 4

<211> 187

<212> PRT

<213> Drosophila

<400> 4

Met Ser Asp Ser Thr Val Cys Phe Ser Lys His Lys Ile Val Pro Asp  
1 5 10 15

Ile Leu Lys Thr Cys Pro Ala Thr Leu Leu Thr Val Thr Tyr Gly Gly  
20 25 30

Gly Gln Val Val Asp Val Gly Gly Glu Leu Thr Pro Thr Gln Val Gln  
35 40 45

Ser Gln Pro Lys Val Lys Trp Asp Ala Asp Pro Asn Ala Phe Tyr Thr  
50 55 60

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Leu Leu Leu Thr Asp Pro Asp Ala Pro Ser Arg Lys Glu Pro Lys Phe  
65 70 75 80

Arg Glu Trp His His Trp Leu Val Val Asn Ile Pro Gly Asn Gln Val  
85 90 95

Glu Asn Gly Val Val Leu Thr Glu Tyr Val Gly Ala Gly Pro Pro Gln  
100 105 110

Gly Thr Gly Leu His Arg Tyr Val Phe Ile Val Phe Lys Gln Pro Gln  
115 120 125

Lys Leu Thr Cys Asn Glu Pro Lys Ile Pro Lys Thr Ser Gly Asp Lys  
130 135 140

Arg Ala Asn Phe Ser Thr Ser Lys Phe Met Ser Lys Tyr Lys Leu Gly  
145 150 155 160

Asp Pro Ile Ala Gly Asn Phe Phe Gln Ala Gln Trp Asp Asp Tyr Val  
165 170 175

Pro Lys Leu Tyr Lys Gln Leu Ser Gly Lys Lys  
180 185

<210> 5

<211> 220

<212> PRT

<213> C. elegans

<400> 5

Met Val Val Leu Val Thr Arg Ser Leu Leu Pro Ala Leu Phe Phe Ala  
1 5 10 15

Ser Arg Ala Pro Phe Ala Ala Ala Thr Thr Ser Ala Arg Phe Gln Arg  
20 25 30

Gly Leu Ala Thr Met Ala Ala Glu Ala Phe Thr Lys His Glu Val Ile  
35 40 45

Pro Asp Val Leu Ala Ser Asn Pro Pro Ser Lys Val Val Ser Val Lys  
50 55 60

Phe Asn Ser Gly Val Glu Ala Asn Leu Gly Asn Val Leu Thr Pro Thr  
65 70 75 80

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Gln Val Lys Asp Thr Pro Glu Val Lys Trp Asp Ala Glu Pro Gly Ala  
85 90 95

Leu Tyr Thr Leu Thr Lys Thr Asp Pro Asp Ala Pro Ser Arg Lys Glu  
100 105 110

Pro Thr Tyr Arg Glu Trp His His Trp Leu Val Val Asn Ile Pro Gly  
115 120 125

Asn Asp Ile Ala Lys Gly Asp Thr Leu Ser Glu Tyr Ile Gly Ala Gly  
130 135 140

Pro Pro Lys Thr Gly Leu His Arg Tyr Val Tyr Leu Ile Tyr Lys Gln  
145 150 155 160

Ser Gly Arg Ile Glu Asp Ala Glu His Gly Arg Leu Thr Asn Thr Ser  
165 170 175

Gly Asp Lys Arg Gly Gly Trp Lys Ala Ala Asp Phe Val Ala Lys His  
180 185 190

Lys Leu Gly Ala Pro Val Phe Gly Asn Leu Phe Gln Ala Glu Tyr Asp  
195 200 205

Asp Tyr Val Pro Ile Leu Asn Lys Gln Leu Gly Ala  
210 215 220

<210> 6

<211> 181

<212> PRT

<213> Antirrhinum-CEN

<400> 6

Met Ala Ala Lys Val Ser Ser Asp Pro Leu Val Ile Gly Arg Val Ile  
1 5 10 15

Gly Asp Val Val Asp His Phe Thr Ser Thr Val Lys Met Ser Val Ile  
20 25 30

Tyr Asn Ser Asn Asn Ser Ile Lys His Val Tyr Asn Gly His Glu Leu  
35 40 45

Phe Pro Ser Ala Val Thr Ser Thr Pro Arg Val Glu Val His Gly Gly  
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60

50

55

Asp Met Arg Ser Phe Phe Thr Leu Ile Met Thr Asp Pro Asp Val Pro  
65 70 75 80

Gly Pro Ser Asp Pro Tyr Leu Arg Glu His Leu His Trp Ile Val Thr  
85 90 95

Asp Ile Pro Gly Thr Thr Asp Ser Ser Phe Gly Lys Glu Val Val Ser  
100 105 110

Tyr Glu Met Pro Arg Pro Asn Ile Gly Ile His Arg Phe Val Phe Leu  
115 120 125

Leu Phe Lys Gln Lys Lys Arg Gly Gln Ala Met Leu Ser Pro Pro Val  
130 135 140

Val Cys Arg Asp Gly Phe Asn Thr Arg Lys Phe Thr Gln Glu Asn Glu  
145 150 155 160

Leu Gly Leu Pro Val Ala Ala Val Phe Phe Asn Cys Gln Arg Glu Thr  
165 170 175

Ala Ala Arg Arg Arg  
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<210> 7

<211> 176

<212> PRT

<213> Aradopsis-TFL1

<400> 7

Met Glu Asn Met Gly Thr Arg Val Ile Glu Pro Leu Ile Met Gly Arg  
1 5 10 15

Val Val Gly Asp Val Leu Asp Phe Phe Thr Pro Thr Thr Lys Met Asn  
20 25 30

Val Ser Tyr Asn Lys Lys Gln Val Asn Gly His Glu Leu Phe Pro Ser  
35 40 45

Ser Val Ser Ser Lys Pro Arg Val Glu Ile His Gly Gly Asp Leu Arg  
50 55 60

SEQ101~1.ST25

Ser Phe Phe Thr Leu Val Met Ile Asp Pro Asp Val Pro Gly Pro Ser  
65 70 75 80

Asp Pro Phe Leu Lys Glu His Leu His Trp Ile Val Thr Asn Ile Pro  
85 90 95

Gly Thr Thr Asp Ala Thr Phe Gly Lys Glu Val Val Ser Tyr Glu Leu  
100 105 110

Pro Arg Pro Ser Ile Gly Ile His Arg Phe Val Phe Val Leu Phe Arg  
115 120 125

Gln Lys Gln Arg Arg Val Ile Phe Pro Asn Ile Pro Ser Arg Asp His  
130 135 140

Phe Asn Thr Arg Lys Phe Ala Val Glu Tyr Asp Leu Gly Leu Pro Val  
145 150 155 160

Ala Ala Val Phe Phe Asn Ala Gln Arg Glu Thr Ala Ala Arg Lys Arg  
165 170 175

<210> 8

<211> 219

<212> PRT

<213> Yeast

<400> 8

Met Asn Gln Ala Ile Asp Phe Ala Gln Ala Ser Ile Asp Ser Tyr Lys  
1 5 10 15

Lys His Gly Ile Leu Glu Asp Val Ile His Asp Thr Ser Phe Gln Pro  
20 25 30

Ser Gly Ile Leu Ala Val Glu Tyr Ser Ser Ser Ala Pro Val Ala Met  
35 40 45

Gly Asn Thr Leu Pro Thr Glu Lys Ala Arg Ser Lys Pro Gln Phe Gln  
50 55 60

Phe Thr Phe Asn Lys Gln Met Gln Lys Ser Val Pro Gln Ala Asn Ala  
65 70 75 80

Tyr Val Pro Gln Asp Asp Asp Leu Phe Thr Leu Val Met Thr Asp Pro  
85 90 95

SEQ101~1.ST25

Asp Ala Pro Ser Lys Thr Asp His Lys Trp Ser Glu Phe Cys His Leu  
100 105 110

Val Glu Cys Asp Leu Lys Leu Asn Glu Ala Thr His Glu Thr Ser  
115 120 125

Gly Ala Thr Glu Phe Phe Ala Ser Glu Phe Asn Thr Lys Gly Ser Asn  
130 135 140

Thr Leu Ile Glu Tyr Met Gly Pro Ala Pro Pro Lys Gly Ser Gly Pro  
145 150 155 160

His Arg Tyr Val Phe Leu Leu Tyr Lys Gln Pro Lys Gly Val Asp Ser  
165 170 175

Ser Lys Phe Ser Lys Ile Lys Asp Arg Pro Asn Trp Gly Tyr Gly Thr  
180 185 190

Pro Ala Thr Gly Val Gly Lys Trp Ala Lys Glu Asn Asn Leu Gln Leu  
195 200 205

Val Ala Ser Asn Phe Phe Tyr Ala Glu Thr Lys  
210 215

<210> 9

<211> 189

<212> DNA

<213> Homo sapiens

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catcatttcc tgggtgggtcaa catgaagggc aatgacatca gcagtggcac agtcctctcc 120

gattatgtgg gctcggggcc tcccaagggc acaggcctgc accgctatgt ctggctgggt 180

tacgagcag 189

<210> 10

<211> 7

<212> DNA

<213> Artificial Sequence

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<220>

<221> misc\_feature

<222> (4)..(4)

<223> n = C or G

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<221> misc\_feature

<223> Consensus AP-1 binding site

<400> 10  
tgantca

7

<210> 11

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<221> misc\_feature

<223> NF-kB binding element consensus sequence

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ggggactttc c

11